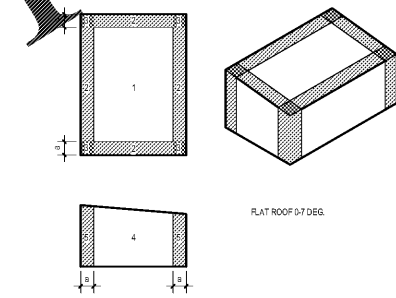


Order Plans

Components & Claddings Pressures



Components & Cladding Zones

WIND DESIGN ASCE 7-10

Risk Category	II
Directionality (K _d)	0.85
Mean Roof H (ft)	17.4
Parapet H above grd	24.25
Exposure Category	C
Enclosure Classif.	Enclosed Building
Internal pressure	0.18
Minimum parapet height at building perimeter =	a = 6.5 ft b = 2.9 ft
Roof Angle	1.2 deg
Type of roof	Monoslope

COMPONENTS & CLADDING

ULTIMATE LOADS:

Basic Wind speed	115.0 mph	(LRFD)			
Base pressure (q) _e	25.2 psf	(LRFD)			
Surface Pressure (psf)-LRFD Values					
Area	10 sf	20 sf	50 sf	100 sf	200 sf
Negative Zone 1	-29.7 psf	-29.0 psf	-28.0 psf	-27.2 psf	-27.2 psf
Negative Zone 2	-49.9 psf	-44.6 psf	-37.6 psf	-32.3 psf	-32.3 psf
Negative Zone 3	-73.1 psf	-62.2 psf	-45.2 psf	-32.3 psf	-32.3 psf
Positive All Zones	16.0 psf	16.0 psf	16.0 psf	16.0 psf	16.0 psf
Overhang Zone 1&2	-42.8 psf	-42.1 psf	-41.1 psf	-40.3 psf	-34.9 psf
Overhang Zone 3	-70.6 psf	-55.4 psf	-35.3 psf	-20.2 psf	-20.2 psf

Walls

Basic Wind speed	115.0 mph	(LRFD)			
Base pressure (q) _e	25.2 psf	(LRFD)			
Surface Pressure (psf)-LRFD Values					
Area	10 sf	20 sf	50 sf	100 sf	500 sf
Negative Zone 4	-29.5 psf	-28.3 psf	-26.7 psf	-25.5 psf	-22.7 psf
Negative Zone 5	-36.3 psf	-33.9 psf	-30.7 psf	-28.3 psf	-22.7 psf
Positive Zone 4 & 5	27.2 psf	28.0 psf	24.4 psf	23.2 psf	20.4 psf

Parapets

Basic Wind speed	115.0 mph	(LRFD)	
Base pressure (q) _e	25.2 psf	(LRFD)	
Surface Pressure (psf)-LRFD Values			
Area	10 sf	50 sf	500 sf
Positive Interior (Zone 4)	17.3 psf	56.7 psf	46.8 psf
Positive Corner (Zone 5)	100.0 psf	64.9 psf	46.8 psf
Negative Interior (Zone 4)	-51.1 psf	-45.1 psf	-42.5 psf
Negative Corner (Zone 5)	-58.4 psf	-49.4 psf	-36.5 psf

SERVICE LOADS:

Basic Wind speed	89.1 mph	(ASD)			
Base pressure (q) _e	15.1 psf	(ASD)			
Surface Pressure (psf)-ASD Values					
Area	10 sf	20 sf	50 sf	100 sf	200 sf
Negative Zone 1	-17.8 psf	-17.4 psf	-16.8 psf	-16.3 psf	-16.3 psf
Negative Zone 2	-29.9 psf	-28.6 psf	-22.9 psf	-19.4 psf	-19.4 psf
Negative Zone 3	-45.1 psf	-37.9 psf	-27.1 psf	-19.4 psf	-19.4 psf
Positive All Zones	9.6 psf	9.6 psf	9.6 psf	9.6 psf	9.6 psf
Overhang Zone 1&2	-25.7 psf	-25.3 psf	-24.7 psf	-24.2 psf	-20.6 psf
Overhang Zone 3	-42.3 psf	-33.2 psf	-21.2 psf	-12.1 psf	-12.1 psf

Walls

Basic Wind speed	89.1 mph	(ASD)			
Base pressure (q) _e	15.1 psf	(ASD)			
Surface Pressure (psf)-ASD Values					
Area	10 sf	20 sf	50 sf	100 sf	500 sf
Negative Zone 4	-17.7 psf	-17.0 psf	-16.0 psf	-15.3 psf	-13.6 psf
Negative Zone 5	-21.8 psf	-20.3 psf	-18.4 psf	-17.0 psf	-13.6 psf
Positive Zone 4 & 5	16.3 psf	15.6 psf	14.7 psf	13.9 psf	12.2 psf

Parapets

Basic Wind speed	89.1 mph	(ASD)	
Base pressure (q) _e	15.1 psf	(ASD)	
Surface Pressure (psf)-ASD Values			
Area	10 sf	50 sf	500 sf
Positive Interior (Zone 4)	43.8 psf	34.0 psf	29.9 psf
Positive Corner (Zone 5)	60.0 psf	38.9 psf	29.9 psf
Negative Interior (Zone 4)	-30.7 psf	-27.0 psf	-25.5 psf
Negative Corner (Zone 5)	-35.0 psf	-29.6 psf	-27.3 psf

Note: Pressures listed above are in both values. Ultimate (LRFD) & Service or Nominal (ASD) which have been obtained by multiplying Ultimate values by 0.75. Use service values (ASD) for Wind Resistance Testing Compliance per FBC 1609.1.5.

Net Uplift Pressures

Basic Wind speed	115.0 mph	(LRFD)			
Base pressure (q) _e	25.2 psf	(LRFD)			
Joint Net Uplift Surface Pressure (psf)-LRFD Values					
Area	10 sf	20 sf	50 sf	100 sf	200 sf
Negative Zone 1	-26.7 psf	-26.0 psf	-25.0 psf	-24.2 psf	-24.2 psf
Negative Zone 2	-46.9 psf	-41.6 psf	-34.6 psf	-29.3 psf	-29.3 psf
Negative Zone 3	-72.1 psf	-59.2 psf	-42.2 psf	-29.3 psf	-29.3 psf

Girder Net Uplift Surface Pressure (psf)-LRFD Values

Basic Wind speed	115.0 mph	(LRFD)			
Base pressure (q) _e	25.2 psf	(LRFD)			
Area	10 sf	20 sf	50 sf	100 sf	200 sf
Negative Zone 1	-24.7 psf	-24.0 psf	-23.0 psf	-22.2 psf	-22.2 psf
Negative Zone 2	-44.9 psf	-39.6 psf	-32.6 psf	-27.3 psf	-27.3 psf
Negative Zone 3	-70.1 psf	-57.2 psf	-40.2 psf	-27.3 psf	-27.3 psf

Joint Net Uplift Surface Pressure (psf)-ASD Values

Basic Wind speed	89.1 mph	(ASD)			
Base pressure (q) _e	15.1 psf	(ASD)			
Area	10 sf	20 sf	50 sf	100 sf	200 sf
Negative Zone 1	-16.8 psf	-16.4 psf	-15.9 psf	-15.3 psf	-15.3 psf
Negative Zone 2	-27.9 psf	-24.8 psf	-20.5 psf	-17.4 psf	-17.4 psf
Negative Zone 3	-43.1 psf	-35.3 psf	-25.1 psf	-17.4 psf	-17.4 psf

Girder Net Uplift Surface Pressure (psf)-ASD Values

Basic Wind speed	89.1 mph	(ASD)		
Base pressure (q) _e	15.1 psf	(ASD)		
Area	10 sf	50 sf	100 sf	200 sf
Negative Zone 1	-18.8 psf	-17.4 psf	-13.8 psf	-13.3 psf
Negative Zone 2	-26.9 psf	-23.8 psf	-19.5 psf	-16.4 psf
Negative Zone 3	-42.1 psf	-34.2 psf	-24.1 psf	-16.4 psf

GENERAL

A. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE SITE AND NOTIFY THE ARCHITECT/ENGINEER OF DISCREPANCIES BETWEEN THE ACTUAL CONDITIONS AND INFORMATION SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH WORK.

B. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE COMPLETE DESIGN OF THE STRUCTURE. THEY DO NOT INDICATE THE MEANS AND METHODS OF CONSTRUCTION UNLESS SO STATED OR NOTED.

C. OBSERVATION VISITS TO THE SITE BY EOR OR REPRESENTATIVES OF THE EOR MAY BE MADE DURING CONSTRUCTION. ANY SUPPORT SERVICES PERFORMED HEREIN SHALL BE DISTINGUISHED FROM INSPECTION AND TESTING SERVICES PERFORMED BY OTHERS, AND ARE NOT TO BE CONSIDERED AS SUPERVISION AND/OR MANAGEMENT OF CONSTRUCTION.

D. THE CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION BRACING AND SHORING OF ALL STRUCTURAL MEMBERS AS REQUIRED FOR STABILITY OF THE STRUCTURE THROUGHOUT ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER OF ANY CONDITION WHICH, IN HIS OPINION, MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS WITHIN THE STRUCTURE.

E. CONSTRUCTION MATERIALS SHALL NOT BE STACKED ON FLOORS OR ROOFS IN EXCESS OF THE DESIGN LIVELOADS. IMPACT SHALL BE AVOIDED WHEN PLACING MATERIALS ON FLOORS OR ROOFS.

F. DRAWINGS ARE NOT TO BE SCALED.

G. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO THE DETAILS PRESENTED, SIMILAR DETAILS SHALL BE USED SUBJECT TO THE REVIEW OF ENGINEER OF RECORD.

H. SUBMIT WRITTEN REQUEST TO THE ARCHITECT FOR APPROVAL OF ANY PROPOSED CHANGE TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. SPlicing, CUTTING, NOTCHING OR OTHER ALTERATIONS TO STRUCTURAL MEMBERS ARE NOT PERMITTED WITHOUT WRITTEN AUTHORIZATION OF THE ENGINEER. ANY UNAUTHORIZED DEVIATION FROM THE CONTRACT DOCUMENTS AND CORRECTION THEREOF, IS THE RESPONSIBILITY OF THE CONTRACTOR. SUBSEQUENT DOCUMENTS AND/OR CORRECTIONS TO BUILDING ENGINEERING OF RECORD FROM GC SHALL INCLUDE EVALUATION OF DEVIATIONS BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT.

I. DESIGN DATA REFER TO SPECIFICATION FOR FURTHER INFORMATION.

J. THE MOST STRINGENT REQUIREMENTS APPLY IN CASE OF CONFLICT BETWEEN SPECIFICATIONS, STANDARDS, CODES AND DRAWINGS.

DESIGN LOADING

SLAB LIVE LOAD	125 PSF
ROOF DEAD LOADS	20 PSF
ROOF LIVE LOADS	20 PSF

SNOW DESIGN:

GROUND SNOW LOAD	P _g 5 PSF
FLAT SNOW LOAD	P _f 9 PSF
SNOW EXPOSURE FACTOR	C _e 1.0
SNOW IMPORTANCE FACTOR	I 1.0
SNOW THERMAL FACTOR	T 1.0

WIND DESIGN, REFERENCE GENERAL NOTES TABLES

SERIES DESIGN:
RISK CATEGORY: II
DESIGN CATEGORY: O
SITE CLASS: 0
BASIS C-R SYSTEM: 0
REINFORCED CONCRETE SHEAR WALLS
(R RESPONSE MOD.): 2
C_r (RESPONSE COEFF.): 0.155
S_r: 25.3%
S₁: 10.2%
S₂: 10.2%
S₃: 16.1%
S₄: 16.1%
ANALYSIS PROCEDURE: EQUILIBRIUM LATERAL FORCE
DESIGN BASE SHEAR: 69.6K(ASD)

CODES / STANDARDS:

215 INTERNATIONAL BUILDING CODE AS APPLICABLE AMENDMENTS

ASCE 7-10, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES

SEE SPECIFICATIONS FOR FURTHER INFORMATION

FOUNDATIONS/SITE WORK

A. FOUNDATION DESIGN IS BASED UPON THE FOLLOWING SOILS REPORT:
COMPANY NAME: BHATE GEOSCIENCES CORPORATION, INC.
DATE: APRIL 2, 2018
PROJECT NUMBER: 19133

B. ALLOWABLE SOIL PRESSURE IS TO BE 2000 PSF.

C. ANY FILL REQUIRED TO BACKFILL EXCAVATED AREAS SHALL BE FINISHED GRADE OR STRUCTURAL AREAS SHALL BE AS INDICATED BY GEOTECHNICAL ENGINEER. FILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 12 INCHES. LIFTS SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE SOIL'S MODIFIED PROUCTURE DENSITY AS DETERMINED BY ASTM SPECIFICATION D-1557.

D. IN-PLACE TESTS SHALL BE PERFORMED BY AN EXPERIENCED ENGINEER. TEST RESULTS SHALL BE PROVIDED FOR EACH SQUARE FOOT OF FOUNDATION COLUMN, FOOTING LOCATION, AND EXPOSED SOLE FEET ALONG WALL FOOTINGS. COPIES OF TEST REPORTS SHALL BE FURNISHED TO THE STRUCTURAL ENGINEER.

E. REMOVE FRESH WATER EXCAVATIONS BEFORE PLACING CONCRETE.

F. CAUTION SHOULD BE USED IN OPERATING VIBRATORY COMPACTING EQUIPMENT NEAR THE EXISTING STRUCTURE TO AVOID THE RISK OF DAMAGE TO THE STRUCTURE.

G. REFER TO STRUCTURE DRAWINGS FOR ANY NECESSARY WATERPROOFING REQUIREMENTS.

SUBMITTALS:

A. SHOP DRAWING REVIEW IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT, CORRELATION OF DIMENSIONS AND OMISSIONS, AND FROM COMPLIANCE WITH THE PLANS AND SPECIFICATIONS. CORRECTIONS OR COMMENTS DO NOT AUTHORIZE AN INCREASE IN THE CONSTRUCTION BUDGET.

B. APPROVAL OF SHOP DRAWINGS DOES NOT INDICATE ACCEPTANCE OF DEVIATIONS FROM CONTRACT DOCUMENTS OR PREVIOUS SHOP DRAWING REVIEW, UNLESS SPECIFICALLY NOTED THEREIN BY ENGINEER OF RECORD.

C. ANY CHANGES TO THE DESIGN CONCEPT SHOWN IN CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITING AND APPROVED BY THE ARCHITECT AND ENGINEER PRIOR TO SUBMITTING SHOP DRAWINGS. ALL SUCH CHANGES SHALL BE "BASED UPON" THE SHOP DRAWINGS AND REFERENCED TO THE PROPER R.F.I.

D. SUBMITTALS SHALL CONFORM TO THE REQUIREMENTS OF THE CONTRACT DRAWINGS (REFERENCE ITEM C ABOVE FOR EXCEPTION). NON-CONFORMING OR NON-REVIEWED SUBMITTALS WILL BE RETURNED WITHOUT REVIEW.

1. SHOP DRAWINGS SHALL BE "APPROVED," SIGNED AND DATED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL TO THE ENGINEER AND ARCHITECT.

2. SHOP DRAWINGS SHALL NOT CONTAIN REPRODUCTIONS OF THE CONTRACT DRAWINGS.

INFORMATION SUBMITTALS - SEE SPECIFICATIONS

ACTION SUBMITTALS - SEE SPECIFICATIONS

DELEGATED ENGINEERING SUBMITTALS - JOISTS & GIRDER
- COLD-FORMED METAL FRAMING
- MINIMUM STORAGE SYSTEMS
- PRE-ENGINEERED CANOPIES, AWNINGS AND MARQUEES

DELEGATED ENGINEERING SUBMITTALS SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT.

ROOF TOP EQUIPMENT

A. UNLESS SPECIFICALLY INDICATED IN PLANS, THE LOCATIONS AND DIMENSIONS OF ROOF TOP EQUIPMENT'S SUPPORTS ARE APPROXIMATE. THE EXACT LOCATIONS AND DIMENSIONS MUST BE COORDINATED WITH FINAL EQUIPMENT AND POSITIONING TO AVOID CONFLICT WITH STRUCTURAL MEMBERS INCLUDING BRACING AND BRACING.

B. PRE-ENGINEERED ROOF TOP EQUIPMENT CUBES, BRACES AND ASSOCIATED CONNECTIONS MUST SAFELY SUPPORT THE WEIGHT OF THE EQUIPMENT AND MEET THE APPLICABLE BUILDING CODE REQUIREMENTS FOR WIND AND SEISMIC.

CONCRETE MASONRY UNITS (CMU)

A. GROUT COMPRESSIVE STRENGTH SHALL BE 3000 PSI AT 28 DAYS. ALL GROUTING SHALL BE LOW LIFT, MAXIMUM GROUT POUR HEIGHT = 4'-0"

B. ALL MASONRY LOCATED BELOW GRADE SHALL BE GROUTED SOLID.

C. PROVIDE 1" DEEP PRECAST REINFORCED CONCRETE LINTELS OVER ALL MASONRY OPENINGS NOT SHOWN TO HAVE A STRUCTURAL BEAM. MINIMUM END BEARING SHALL BE 6" LITTLE WIDTH TO MATCH MASONRY WIDTH.

D. REINFORCING UNLESS OTHERWISE NOTED IN PLANS:

- 1. LAP SPLICES SHALL BE 48 X BAR DIAMETERS.
- 2. HORIZONTAL WALL REINFORCING SHALL BE 9 GA. GALVANIZED LADDER TYPE #10 C.VERT.
- 3. ALL DOWELS SHALL MATCH REINFORCING SIZE AND QTY.

E. POWDER ACTUATED FASTENERS (PAFS) NOT PERMITTED AT MASONRY.

REINFORCED CONCRETE

A. CAST-IN-PLACE CONCRETE, UNLESS OTHERWISE NOTED (U.O.I.):

SLABS
3000 PSI 28-DAY COMPRESSIVE STRENGTH, NORMAL WEIGHT, 0.87 MAX. W/C

FOOTINGS / PIERS / FORMED WALLS
3000 PSI 28-DAY COMPRESSIVE STRENGTH, NORMAL WEIGHT, 0.87 MAX. W/C

COLUMNS/BEAMS
4000 PSI 28-DAY COMPRESSIVE STRENGTH, NORMAL WEIGHT, 0.85 MAX. W/C

CONCRETE EXPOSED TO FREEZE-THAW CONDITIONS SHALL BE AIR ENTRAINED

B. CONCRETE COVER OVER REINFORCEMENT:

ANY CONCRETE CAST AGAINST SLEATH:

FOOTINGS
2" MINIMUM SIDES; 2" TOP

FORMED PIERS & WALLS
2" MIN. AND LARGER, 1 1/2" TO 4" IS

SLABS, COLUMNS AND BEAMS EXPOSED TO EARTH OR WEATHER
2" MIN. AND LARGER, 1 1/2" TO 4" IS

SUBJECT TO EITHER TO EARTH OR WEATHER
3/4" TO 1"

BEAMS AND COLUMNS NOT EXPOSED TO EARTH OR WEATHER
1 1/2" (4" TO 6")

C. REINFORCING, UNLESS OTHERWISE NOTED (U.O.I.):

- 1. WELDED WIRE FABRIC SHALL BE CONTINUOUS, LAPPED OR CROSS WIRE SPACING PLUS 2" MINIMUM.
- 2. WHERE CONTINUOUS REINFORCING IS SPECIFIED, SUCH REINFORCING MAY BE SPLICED WHERE APPROVED IN WRITING BY THE ENGINEER OF RECORD.
- 3. AT CHANGES IN DIRECTION OF CONCRETE WALLS, BEAMS, AND FOOTINGS, PROVIDE CORNER BARS OF SAME SIZE, QUANTITY AND SPACING AS HORIZONTAL STEEL.
- 4. LAP SPLICES SHALL BE PER LAP SPLICE TABLE BELOW, WIRED TOGETHER AND THEIR POSITION SHALL BE AS NOTED:

D. THERE SHALL BE NO HORIZONTAL JOINTS IN ANY CONCEALED JOINTS UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.

E. POWDER ACTUATED FASTENERS (PAFS) NOT PERMITTED AT CONCRETE

SPLICE LENGTHS (L_d) FOR GRADE OR BARS

REF. SIZE	3000	4000
#3	18"	18"
#4	18"	24"
#5	18"	30"
#6	24"	36"
#7	30"	42"
#8	36"	48"
#9	42"	54"
#10	48"	60"
#11	54"	66"

*Use bar cover of (1)2in. and max. spacing of (2)24in.

STRUCTURAL STEEL

A. WELDING, UNLESS OTHERWISE NOTED (U.O.I.):

- 1. ALL WELDING IN THE SHOP AND IN THE FIELD SHALL BE PERFORMED BY CERTIFIED WELDERS ONLY.
- 2. WELDING ELECTRODES SHALL BE ER70X LOW HYDROGEN.

B. CONNECTIONS, UNLESS OTHERWISE NOTED (U.O.I.):

- 1. TIGHTEN BOLTS BY THE "SNUG-TIGHT" METHOD.
- 2. FIELD CONNECTIONS SHALL BE MADE WITH 3/4" DIA. MIN. HIGH STRENGTH BEARING TYPE BOLTS (A325) WITH THREADS ASSUMED TO BE INCLUDED IN SHEAR PLANES.
- 3. SINGLE SHEAR CONNECTIONS SHALL EMPLOY THE MAXIMUM NUMBER OF BOLTS IN A SINGLE ROW AS AFFORDED BY CONNECTION GEOMETRY W/ 1/2" MIN. EDGE SPACING ALL AROUND. SINGLE SHEAR CONNECTIONS AT RISER COLUMNS SHALL BE SINGLE-PLATE (BUTTED PLATES NOT PERMITTED) SINGLE SHEAR CONNECTIONS AT BEAMS SHALL BE SINGLE-PLATE OR DOUBLE-ANGLE.

C. GROUT UNDER BEARING PLATES SHALL HAVE COMPRESSIVE STRENGTH OF AT LEAST 8000 PSI WHEN BEARING ON 3000 PSI CONCRETE AND 8000 PSI WHEN BEARING ON 4000 PSI CONCRETE.

D. UNLESS OTHERWISE NOTED, ALL STEEL EXPOSED TO WEATHER SHALL BE HOT-SPRAY GALVANIZED OR OTHERWISE PROTECTED.

E. UNLESS OTHERWISE NOTED, ALL STEEL EXPOSED TO SOIL SHALL BE ENCASED IN CONCRETE COATED WITH AN ASPHALTIC BASED CORROSION RESISTANCE COATING UPON INSTALLATION OR OTHERWISE PROTECTED.

STEEL JOISTS AND STEEL GIRDERS

A. ALL JOISTS AND GIRDERS SHOWN IN THE PLANS ARE MINIMUM SIZES. DEPTH CANNOT BE DECREASED OR INCREASED WITHOUT WRITTEN APPROVAL BY ARCHITECT/ENGINEER.

B. STEEL JOIST AND GIRDER DEPTHS TO BE:

- 1. ALL K-SERIES JOISTS TO HAVE 2 1/2" DEPTHS
- 2. ALL L-SERIES JOISTS TO HAVE 2 1/2" DEPTHS
- 3. ALL LH-SERIES JOISTS TO HAVE 3 DEPTHS
- 4. ALL JOIST GIRDERS TO HAVE 7 1/2" DEPTHS

C. PROVIDE BRACING AND X-BRACING AS PER THE REQUIREMENTS OF SJI AND AS FOLLOWS. SHOULD PLANS OR NOTES INDICATE BRACING AND X-BRACING IN EXCESS OF THAT REQUIRED BY SJI, PLANS & NOTES WILL GOVERN.

- 1. PROVIDE X-BRACING AT ALL HORIZONTAL BRACING INCLUDING UPLIFT BRACING AT INTERVALS NOT TO EXCEED 100 FEET IN LENGTH.
- 2. PROVIDE X-BRACING ON BOTH SIDES OF W BEAMS (EITHER DIRECTLY ADJACENT TO W BEAMS OR NEXT BAY FROM W BEAMS), TYP. ALL HORIZONTAL BRACING LINES EXCEPT UPLIFT.
- 3. PROVIDE X-BRACING AT ALL HORIZONTAL BRACING INCLUDING UPLIFT BRACING AT OUTSIDE (END) BEAMS WHERE OCCURS.
- 4. PROVIDE X-BRACING AT ALL HORIZONTAL BRACING INCLUDING UPLIFT BRACING AT END BAYS WHERE BRACING IS TERMINATED AT X BRACING JOINT LOCATIONS.
- 5. PROVIDE X-BRACING AT ALL HORIZONTAL BRACING INCLUDING UPLIFT BRACING AT END BAYS WHERE BRACING IS TERMINATED.
- 6. PROVIDE X-BRACING EACH SIDE AT ALL HORIZONTAL BRACING INCLUDING UPLIFT BRACING WHERE CONCENTRATED POINT LOAD GREATER THAN 500 POUNDS OCCURS.
- 7. PROVIDE X-BRACING EACH SIDE AT ALL HORIZONTAL BRACING INCLUDING UPLIFT BRACING WHERE DISCONTINUED.

D. MINIMUM WELDS, U.O.I.:

- 1. BAR JOIST ENDS 3/8" FILLLET, 2" LONG, EACH SIDE OR 1/4" FILLLET, 3" LONG, EACH SIDE
- 2. JOIST GIRDER ENDS 1/4" FILLLET, 4" LONG, EACH SIDE

STEEL DECK NOTES

A. REFER TO PLAN FOR THICKNESS AND ATTACHMENT REQUIREMENTS.

B. PROVIDE SUPPORTS FOR THICKNESS AS REQUIRED WHERE METAL DECK IS OUT OF WELD DECK TO SUPPORTS SAME AS EDGE CONNECTION.

C. PROVIDE STL. SHIMS AND EMBEDS AS REQUIRED TO SUPPORT DECK ON "TYPICAL" BAY SPACING.

COLD-FORMED STEEL FRAMING, TRUSSES AND TRUSS SYSTEM

A. MATERIALS, U.O.I.:

- 1. SHIMS 1/8" DIA. AND HEAVIER SYSTEM 5/16" DIA. GAL. 45 MIN.
- 2. SAILS, 1/8" DIA. AND 45 MIN. GAL. STUDS 33 KSI MIN.
- 3. RUNNERS AND ACCESSORIES 33 KSI MIN.

B. PROVIDE MANUFACTURER'S STANDARD STEEL RUNNERS, BRIDGING, BLOKS, BRACING, CLIPS, REINFORCEMENTS, ETC. TEMPORARY AND PERMANENT. AS REQUIRED TO PROVIDE A COMPLETE FRAMING SYSTEM CAPABLE OF ACCOMMODATING THE LOADS PRESENTED IN THE CONSTRUCTION DOCUMENTS.

C. FIELD SPLICES IN MATERIALS SHALL NOT BE PERMITTED EXCEPT WHERE INDICATED IN SHOP AND/OR INSTALLATION DRAWINGS AND APPROVED BY STRUCTURAL ENGINEER.

D. DEFLECTION LIMITS, U.O.I. IN SPECIFICATIONS OR PLANS:
LOAD, U.O.I.
UNL. BRACK AND MASONRY VEINER

REQUIREMENTS FOR SPECIAL INSPECTION (PER IBC)

A. SOURCE AND FIELD QUALITY CONTROL REQUIREMENTS ARE ALSO STATED IN THE SPECIFICATIONS. COMPLY WITH THE MORE STRINGENT OF THE SPECIFICATIONS AND THESE REQUIREMENTS FOR SPECIAL INSPECTION.

GENERAL

A. SPECIAL INSPECTIONS SHALL BE PERFORMED FOR THIS FACILITY IN ACCORDANCE WITH THE IBC TABLE OF SPECIAL INSPECTIONS PER SECTION 1705 AND ARE IN ADDITION TO THOSE REQUIRED BY SECTION 105.

B. SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE FOR INSPECTION OF THE TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

C. SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE PROJECT MANAGER AND TO THE ENGINEER OF RECORD, DISTRIBUTED TO A REGISTERED PROFESSIONAL ENGINEER. INDICATE THAT WORK INSPECTION WAS PERFORMED IN CONFORMANCE WITH APPROVED CONSTRUCTION DOCUMENTS, OR NOTATION OF DISCREPANCIES. DISCREPANCIES SHALL BE REPORTED TO THE IMMEDIATE ATTENTION OF THE PROJECT MANAGER AND ENGINEER OF RECORD.

D. SUBMIT A FINAL REPORT DOCUMENTING ALL SPECIAL INSPECTIONS FOR EACH TYPE OF CONSTRUCTION, INCLUDE RECOMMENDATIONS AND CORRECTIONS FOR ANY "NOTED DISCREPANCIES". FINAL REPORTS SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER.

SUBCONTRACTOR RESPONSIBILITY:

A. EACH SUBCONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN PART OF THE SEISMIC FORCE-RESISTING SYSTEM OR WIND OR SEISMIC FORCE-RESISTING COMPONENT SHALL SUBMIT A WRITTEN SUBCONTRACTOR'S STATEMENT OF RESPONSIBILITY TO THE PROJECT MANAGER AND TO THE ENGINEER OF RECORD PRIOR TO THE BEGINNING OF THE SYSTEM OR COMPONENT.

B. SUBCONTRACTORS STATEMENT OF RESPONSIBILITY SHALL COMPLY WITH THE FOLLOWING:

- 1. ADOPTIVE EXECUTIVE OF APPROVED SPECIAL INSPECTIONS CONTAINED IN THE CONTRACT INSURANCE PLAN.
- 2. ADOPTIVE EXECUTIVE OF APPROVED SPECIAL INSPECTIONS CONTAINED IN THE CONTRACT INSURANCE PLAN THAT CONTROLS WELDED JOINTS IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.
- 3. PROCEDURES FOR EXERCISING CONTROL OVER THE SUBCONTRACTOR'S ORGANIZATION, METHOD AND FREQUENCY OF REPORTING TO THE DISTRIBUTION OF THE REPORTS.
- 4. IDENTIFICATION AND VERIFICATION OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITIONS WITHIN THE ORGANIZATION.

C. FOR ITEMS REQUIRING PERIODIC INSPECTION, INSPECT WORK ON A FULL-TIME BASIS, AND BE PRESENT IN THE AREA DURING THE DURATION OF THE ACTIVITY.

D. ITEMS REQUIRING CONTINUOUS INSPECTION, INSPECT WORK ON A FULL-TIME BASIS, AND BE PRESENT IN THE AREA DURING THE DURATION OF THE ACTIVITY.

INSPECTION DETAILS:

A. THE SPECIAL INSPECTOR SHALL VERIFY THAT THE FABRICATOR MAINTAINS DETAILED RECORDS AND CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM WITH APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS PRIOR TO THE START OF WORK.

B. SPECIAL INSPECTOR SHALL REVIEW THE PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE PRIOR TO THE START OF WORK.

C. FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE PROJECT MANAGER AND TO THE ENGINEER OF RECORD STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AT COMPLETION OF WORK.

STEEL CONSTRUCTION

A. MATERIAL VERIFICATION OF STRUCTURAL STEEL: PERIODIC INSPECTION: (1) IDENTIFICATION MARKING TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS, (2) SUBMITTALS OF MANUFACTURER'S CERTIFIED MILL TEST REPORTS TO ENGINEER OF RECORD.

1. STRUCTURAL WELDING: VERIFY WELD FILLER MATERIALS, WELDING PROCEDURES, AND QUALIFICATIONS OF WELDERS PRIOR TO THE START OF WORK. WELDING INSPECTION AND BASIS FOR WELDING INSPECTION QUALIFICATION SHALL BE IN CONFORMANCE WITH AWS D1.1.

2. PERIODIC INSPECTION: (1) SINGLE PASS FILLET WELDS NOT EXCEEDING 5/16" SIZE (2) FLOOR AND ROOF DECK WELDING, (3) WELDING OF STAR AND MAILING SYSTEMS.

3. CONTINUOUS INSPECTION: (1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS, (2) MULTIPASS FILLET WELDS, (3) SINGLE PASS FILLET WELDS EXCEEDING 5/16" SIZE.

DETAILS:

1. PERIODIC INSPECTION: STEEL FRAMING TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE APPROVED CONSTRUCTION DOCUMENTS, SUCH AS BRACING STEPPING, MEMBER LOCATION AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION.

C. HIGH-STRENGTH BOLTED CONNECTIONS: INSPECT IN ACCORDANCE WITH AISI308C SPECIFICATIONS.

1. PERIODIC INSPECTION: VERIFY IDENTIFICATION MARKING OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS OR A PERIODIC BASIS.

2. PERIODIC INSPECTION: BOLTS REQUIRED TO BE SNUG-TIGHT: VERIFY THE CONNECTED PARTS HAVE BEEN DRAWN TOGETHER AND PROPERLY SNUGGED.

3. PERIODIC INSPECTION: BOLTS REQUIRING PRE-TENSIONING AND/OR SLP CRITICAL: (1) OBSERVE THE PRE-TENSIONING AND CALIBRATION PROCEDURES; (2) MONITOR BOLT INSTALLATION USING THE DIRECT TENSION INDICATOR METHOD OR ALTERNATE DESIGN FASTENERS THIS OFF-BOLT METHOD; (3) VERIFY THE CONNECTED PARTS HAVE BEEN DRAWN TOGETHER AND PROPERLY SNUGGED; (4) MONITOR THE INSTALLATION OF THE BOLTS TO VERIFY THAT THE SELECTED PROCEDURE FOR PRE-TENSIONING IS PROPERLY USED TO TIGHTEN BOLTS.

4. CONTINUOUS INSPECTION: BOLTS REQUIRING PRE-TENSIONING AND/OR SLP CRITICAL: (1) MONITOR BOLTS INSTALLATION FOR PRE-TENSIONING USING CALIBRATED WRENCH-METHOD OR TURN OF THE NUT METHOD.

CONCRETE CONSTRUCTION

A. PERIODIC INSPECTION: (1) INSPECTION AND PLACEMENT OF REINFORCING STEEL, (2) VERIFY USE OF APPROVED DESIGN MIX, (3) INSPECTION OF CURING TEMPERATURE AND TECHNIQUE, (4) INSPECTION OF FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE BEING FORMED, (5) VERIFICATION OF IN-SITU CONCRETE STRENGTH PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS, (6) INSPECTION OF PRECAST CONCRETE BEAMS, (7) INSPECTION AND PLACEMENT OF PRESTRESSING TENDONS IN PERFORMED IN-SITU CONCRETE STRENGTH PRIOR TO STRESSING OF TENDONS.

B. CONTINUOUS INSPECTION: (1) SAMPLING OF FRESH CONCRETE TO VERIFY COMPLETENESS OF STRENGTH, SLUMP, AIR CONTENT, AND TEMPERATURE (SEE PROJECT'S SPECIFICATION SECTION 03300), (2) INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES INCLUDING MIXING, CONVEYING, DEPOSITING AND VIBRATING, (3) APPLICATION OF PRESTRESSING FORCE, (4) INSPECTION OF SIGNED PRE-STRESSING TENDONS IN THE SEISMIC FORCE RESISTING SYSTEM.

MASONRY CONSTRUCTION

COMPLY WITH LEVEL 1 SPECIAL INSPECTION.

A. PERIODIC INSPECTION: AT THE START OF MASONRY CONSTRUCTION: (1) PROPORTIONS OF SITE PREPARED MORTAR, (2) CONSTRUCTION OF MORTAR JOINTS, (3) LOCATION OF REINFORCEMENT AND CONNECTORS.

B. PERIODIC INSPECTION: VERIFY THE FOLLOWING: (1) SIZE AND LOCATION OF STRUCTURAL ELEMENTS, (2) TYPICAL SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORING AND MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION, (3) SIZE, GRADE AND TYPE OF REINFORCEMENT, (4) PROTECTION OF MASONRY DURING COLD (BELOW 40 DEGREES F) OR HOT (ABOVE 90 DEGREES F) WEATHER.

C. PERIODIC INSPECTION: PRIOR TO GROUTING VEINER: (1) GROUT SITE BE CLEAN, (2) PLACEMENT OF REINFORCEMENT AND CONNECTORS, (3) PROPORTIONS FOR SITE PREPARED GROUT, (4) CONSTRUCTION OF MORTAR JOINTS.

D. PER